REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-3 are pending in the application.

Claim 1 has been amended to correct the antecedent basis. The claim breadth has not been amended. No claims have been amended to overcome prior art. No new matter has been added.

In response to the Examiner's statement regarding the listing of references in the specification, Applicants note that every reference listed in the specification are also disclosed in the Information Disclosure Statement filed on March 16, 2005.

In response to the Examiner's statement regarding the title, Applicants amend the title as set forth above.

In response to the Examiner's statement regarding alleged errors in the specification, Applicants note the Divisional Application incorporated the amendments made in the parent application.

The rejection of claims 1-3 under 35 U.S.C. § 112, second paragraph, is obviated by the amendments to claim 1 as set forth above. Accordingly, withdrawal of the Section 112 rejection is respectfully requested.

The rejection of claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,786,608 (Griffith) is respectfully traversed. The claimed invention is not anticipated by Griffith for the following reasons.

The present invention concerns modification of SOI material, rather than improvement of manufacturing method for SOI material, which is known as a kind of technology on modification of Si bulk material. SOI material is an industrial product having proper functions, which can be manufactured by various methods, for example by SIMOX method, or Smart-Cut etc. A kind of material named as SOI is necessary to having tri-layer structure. The SOI top layer must be perfect single crystalline silicon, on which effective microelectronic circuits, namely semiconductor device can be produced. The SOI buried layer must be amorphous silicon dioxide layer having a good isolator property. The interface between these two layers must be sharp, even and perfect.

Griffith only discloses a method for manufacturing a SOI material with two ion

implantation steps and a annealing step which correspond (but are not identical) to the steps as shown in Figs. 1A-1C of the present invention, while the currently pending claims 1-3 are directed to the modification process as shown in Figs. 2A-2B of the present invention.

The ion implantation step as shown in Fig. 2 of Griffith is not carried out on a SOI material. In particular, as the first step for manufacturing SOI material with conventional SIMOX method, the oxygen ion implantation into Si with heavy dose as used in Griffith (Fig. 1) can only form roughly three regions on the original Si substrate and there is no clear interface between any two regions. In other words, the material to be processed in Fig. 2 of Griffith is not the tri-layer structure of the presently claimed SOI material.

In summary, the claimed invention is for eliminating silicon islands and pinholes in the buried oxide layer in an already formed SOI material, while Griffith is for manufacturing a SOI material by SIMOX. They are basically two separate methods that process different objects for achieving different technical purposes.

In view of the differences between Griffith and the claimed invention, withdrawal of the Section 102 rejection is respectfully requested.

In view of all of the objections and rejections of record having been addressed, it is believed that the present application is in condition for allowance and Notice to that effect is respectfully requested.

Respectfully submitted,

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